AMENDMENT TO THE SPECIFICATION

Please replace paragraph [0020] with the following rewritten paragraph:

A second frequency range is provided with a maximum frequency of approximately 250 kHz ± 50 kHz. The minimum frequency in this second range is again 25 kHz ± 5 kHz as in the first range for convenience and practical application. However, it should be apparent that minimum frequencies can be varied over the different ranges. As with the first range, the maximum frequency in the second range is established at 0 volts on voltage VVCO input 12, while a minimum output frequency corresponds to 5 volts on voltage VVCO input 12. Again, it should be apparent that any ~~range~~ correlation ~~with~~ between input voltage and minimum and maximum frequency values for a given frequency range can be used[[,]]. ~~as well as~~ In addition, it should also be apparent that any number of frequency ranges may be provided.

Please replace paragraph [0022] with the following rewritten paragraph:

Different ranges of oscillator frequency output are obtained by adding various currents to current source I25 to charge capacitor CT at a faster rate. As capacitor CT charges more quickly, the output oscillator frequency tends to increase. In one particular range, as illustrated in circuit 10, a current source I50 is coupled with current source I25 to provide additional current to capacitor CT. The point at which current source I50 is connected to the oscillator circuit is determined by comparator 13 and voltage VVCO input 12, in conjunction with a status of switch 15. Comparator 13 compares voltage VVCO input 12 with the voltage on capacitor CT to produce an output to switch 15. Switch 15 uses the output from comparator 13 to switch an additional current source in combination with current source I25 to increase the speed at which capacitor CT charges. Which current source is combined with current source I25 is determined by other inputs to switch 15, including values at the SSN input lead. The inputs to switch 15 could, for example, signal a specific current source to combine with current source I25 based on a circuit power up status.

Please replace paragraph [0024] with the following rewritten paragraph:

Similarly, to obtain a second frequency range, switch 15 ~~turns off switch MP2 to permit a current source I250~~ is configured through the SSN input lead to select current source I250 to combine with current source I25 ~~to flow into capacitor CT to further increase the steepness of the slope for charging capacitor CT~~. In particular, when switch 15 is configured in this way, as voltage VVCO input 12 is approximately equal to the voltage on capacitor CT, the output of comparator 13 turns on, causing output VG250 of switch 15 to turn switch MP2 off. As a result, current source I250 flows into capacitor CT with current source I25, thereby further increasing the steepness of the slope for charging capacitor CT. By selecting between different current sources and switching the various ~~currents~~ current sources into capacitor CT[[,]] at different charging times, different ~~and thus~~ frequency ranges and different frequency values can be adapted and controlled for various oscillator applications. According to this exemplary control scheme, the charging current is set at a fixed first slope for any frequency range selected when the output of comparator 13 is off, and set at a steeper slope relative to the selected frequency range when comparator 13 turns on.

Please replace paragraph [0025] with the following rewritten paragraph:

Referring now to Figure 2, a logic diagram of current charging control is illustrated generally as diagram 20. Diagram 20 represents the logical components of switch 15 illustrated in circuit 10 of Figure 1. Diagram 20 shows how the digital signals VG25 and VG250 are supplied to ~~various other components, such as~~ switches MP8 and MP2[[,]] to switch between different ranges of oscillator frequency output. In addition, the outputs provided by the logic circuit in diagram 20 control the slope of the charge on capacitor CT once the output of comparator 13 turns on, i.e., input OCOMP in diagram 20 goes high. The setpoint provided by reference voltage VVCO input 12 determines the switching point for the slope change as capacitor CT charges, and the selected frequency range determines how steep the slope will be. This relationship between setpoint and selected frequency range is illustrated and described in greater detail below.